

WHAT IS CLAIMED:

1. A method comprising:
receiving modeling parameters from a remote print shop;
and
5 executing a modeling program using the modeling
parameters to generate model output data.
2. The method of claim 1 wherein the modeling parameters
are received via the Internet.
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3. The method of claim 2 wherein the modeling parameters
are received via a web based connection.
4. The method of claim 2 wherein the modeling parameters
15 are received via an email.
5. The method of claim 1 wherein the modeling parameters
are received via the telephone.
- 20 6. The method of claim 1 wherein the modeling parameters
are received via a facsimile transmission.
7. The method of claim 1 further comprising the step of
forwarding the model output data to the remote print shop.
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8. The method of claim 1 wherein the modeling parameters
include print shop organization information.
9. The method of claim 8 wherein the print shop organization
30 information includes information regarding at least one of cell composition and
the equipment available in each cell.

10. The method of claim 8 wherein the print shop organization information includes at least one of equipment and labor resources available at the print shop, the capacity of the equipment resources, failure history of the equipment, repair history of the equipment, and the production costs per unit time
5 used for each resource including equipment and labor and material parameters.

11. The method of claim 1 wherein the modeling parameters include print job requirements.

10 12. The method of claim 11 wherein the print job requirements include at least one of information regarding the number of individual items in the job; the number of pages in each item, job name, job identifier, batch size, number of batches and inter-process buffer size.

15 13. The method of claim 1 wherein the model output data includes at least one of identification of a bottleneck process, turnaround time for the print job, optimal batch size, cost of the print job, and optimal parameters for the control policy such as a scheduling algorithm, job prioritization data and resource allocation information.

20 14. The method of claim 1, further comprising:
receiving performance data for equipment in the print shop;
saving the performance data to a database;
retrieving the performance data from the database; and
25 analyzing the performance data to determine suggested
print shop changes.

15 15. The method of claim 14 further comprising forwarding the suggested print shop changes to the print shop.

30 16. The method of claim 1 further comprising the step of determining suggested print shop organization revisions based upon parameters for a mix of print jobs and upon the current print shop organization.

17. A system comprising a server including a modeling module that receives modeling parameters from a remotely located print shop and generates model output data.

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18. The system of claim 17 wherein the modeling parameters include print shop organization information.

19. The system of claim 18 wherein the print shop organization information includes information regarding at least one of cell composition and the equipment available in each cell.

20. The system of claim 18 wherein the print shop organization information includes at least one of equipment resources available at the print shop, the capacity of the equipment resources, failure history of the equipment, repair history of the equipment, the production costs per unit time used for each resource, resource performance fluctuations, difference in performance across operators and resource material related dependencies.

21. The system of claim 17 wherein the modeling parameters include print job requirements.

22. The system of claim 21 wherein the print job requirements include information regarding at least one of the number of individual items in the job; the number of pages in each item, job name, job identifier, batch size, number of batches and inter-process buffer size.

23. The system of claim 17 wherein the model output data includes at least one of identification of a bottleneck process, turnaround time for the print job, optimal batch size, cost of the print job, and optimal parameters for the control policy.

24. The system of claim 17 wherein the server further comprises a design module adapted to receive print shop organization information and to generate suggested print shop organization revisions.

5 25. The system of claim 17 wherein the server further comprises a reorganization module adapted to receive parameters regarding a change in print job mix at the print shop and to generate suggestions for reorganizing the print shop.

10 26. The system of claim 17 wherein the system is adapted to receive the modeling parameters via the Internet.

 27. The system of claim 26 wherein the system is adapted to receive the modeling parameters via a web based connection.

15 28. The system of claim 26 wherein the system is adapted to receive the modeling parameters via an email.

 29. The system of claim 17 wherein the system is adapted to receive the modeling parameters via the telephone.

 30. The system of claim 17 wherein the system is adapted to receive the modeling parameters via a facsimile transmission.

25 31. The system of claim 17 further comprising:
 a design module adapted to receive performance data for equipment and operators in the print shop; and
 a database for saving the performance data, wherein the design module is adapted to retrieve the performance data from the database and
30 to analyze the performance data to determine suggested print shop changes.

 32. The system of claim 31 wherein the design module is further adapted to forward the suggested print shop changes to the print shop.

33. The system of claim 17 further comprising a reorganization module adapted to determine suggested print shop organization revisions based upon parameters for a mix of print jobs and upon the current print shop organization.

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